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408

9.11 POSITIVE ION COMPOSITION IN THE POLAR D AND E REGIONS MEASURED DURING MODERATE IONOSPHERIC ABSORPTION

P. Lämmerzahl and D. Krankowsky

Max-Planck-Institut für Kernphysik
Postfach 103980, D-6900 Heidelberg, FRG

During the MAC/Epsilon campaign a mass spectrometer probe was flown on a rocket launched from Andoya (Norway) on 12 November 1987 at 0021 UT providing partial ion density profiles in the altitude range between < 50 km and 125 km. Due to the short sampling period of 0.17 seconds structural features could be observed at ~ 150 m height resolution in the regimes where metal ions occur and where cluster ions are dominant. The observations were made during stable ionospheric absorption of 1 - 1.5 dB. Preliminary results are presented and discussed.

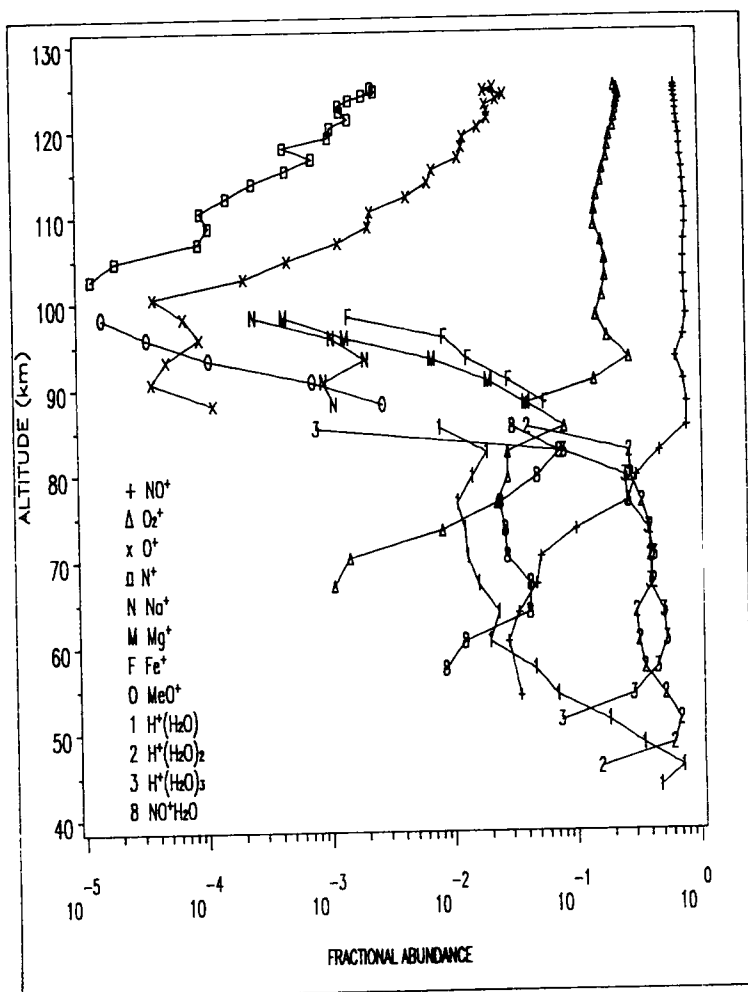


Figure 1.

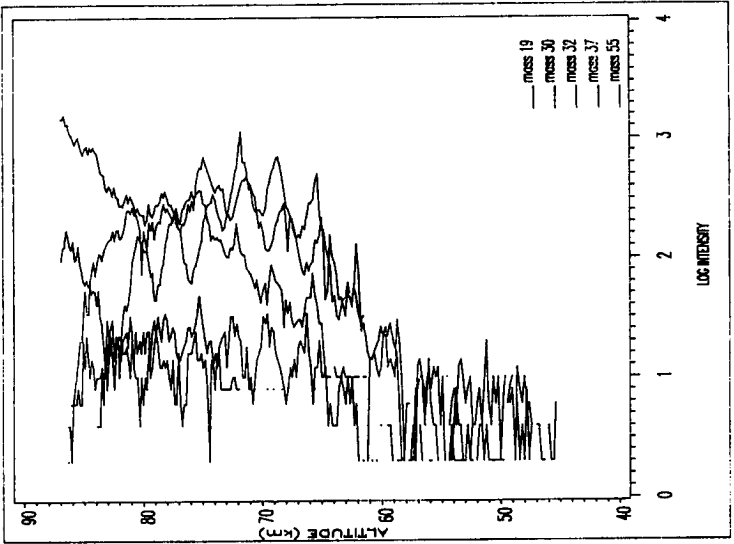


Figure 2.

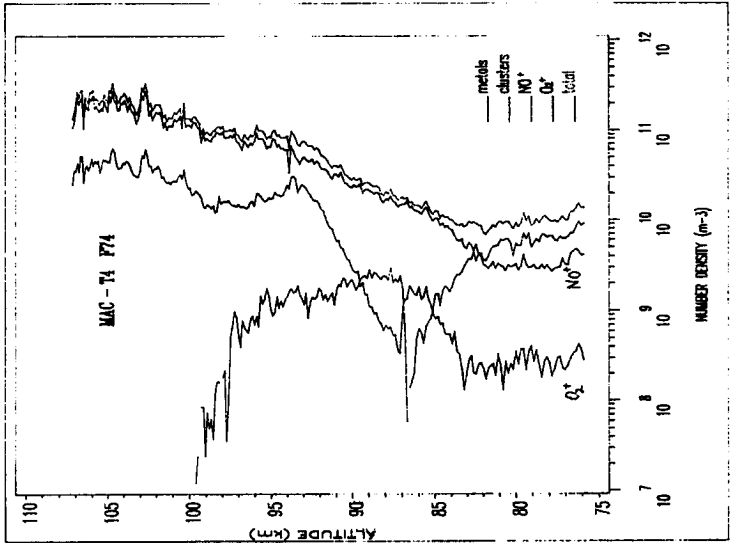


Figure 3.

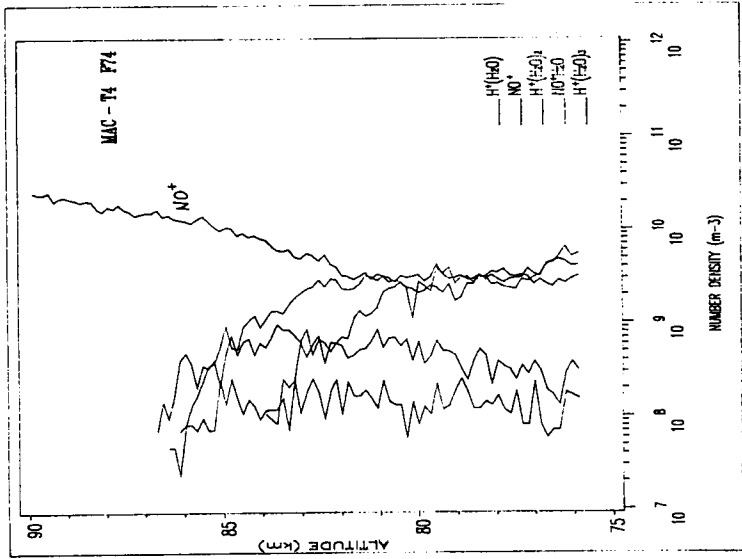


Figure 4.

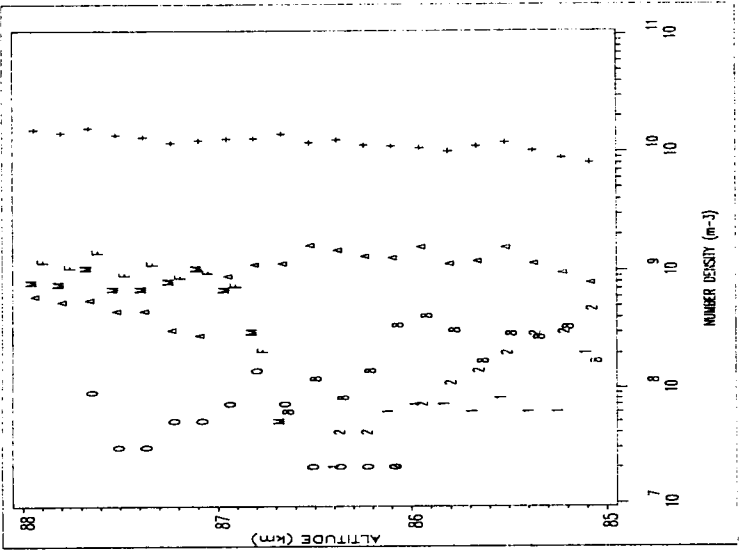


Figure 5.